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SUBJECT INDEX

INTRODUCTION.

The entries in this index refer to the abstracts by their serial number, not by the page number. The entries are grouped under headings (underlined, e.g. "Abrasion") which represent, in the main, general categories or concepts rather than specific names. If a heading for a particular subject does not appear, a more general heading should be consulted; for example, "Zone plates" would be listed under "Diffraction"; "Barkhausen discontinuities" under "Magnetization process". There are numerous cross-references directing attention to related headings in other parts of the index.

Many of the headings are subdivided by the use of subheadings, which are indented (i.e. printed slightly to the right) and commence with a small letter (for example, see the subheadings under "Absorption").

ARRANGEMENT OF HEADINGS AND SUBHEADINGS.

The headings are arranged throughout the index in alphabetical order according to British Standard 1749:1951 (the "word by word" system, not "reading right through"). The subheadings, with a few exceptions, are themselves arranged in alphabetical order under their respective headings. The exceptions (for example, see the subheadings under "Spectra", "Crystal structure, atomic") are cases where a more logical order is preferable to a purely alphabetical one.

INDENTED GROUPS OF ENTRIES.

In addition to the above, minor groupings of entries have been made by indentation under an introductory entry. The first phrase of the introductory entry (i.e. the phrase preceding the comma) is common to each of the indented entries. It is emphasized, however, that these groupings do not necessarily collect all the information on their particular subject; they are only convenient groupings of words, and further references may be given elsewhere in the same column under a different phrase.

COLLECTED LIST OF SUBJECT HEADINGS.

The alphabetical arrangement of the headings is the most convenient for locating a known heading quickly, but there may be other related headings elsewhere in the index of which the reader is unaware, and which he would only come across by accident. To assist the reader to discover all the headings appropriate to his subject, a collected list of the headings is given at the end of the index, which should be consulted as a matter of routine each time a search is made. In this list, the headings are not arranged in alphabetical order, but are grouped into sections by subject on the same basis as the arrangement of the abstracts in the monthly issues of Physics Abstracts. By using this list, the reader can quickly determine which are the headings appropriate to his subject, and they are then easily found in the main index in their alphabetical position.

HEADINGS WITH NO ENTRIES.

Because physics is a developing subject, it is not possible to maintain the list of headings unchanged from year to year; it is subject to a continuous process of revision, with the introduction of new headings and subheadings, and the alteration and elimination of old ones. This process is a gradual one, however, and the great majority of the headings are the same as those of the previous year. To assist in maintaining the continuity of the index, all the headings in current use are printed each year, even those for which there are no abstracts to be recorded in the present volume. The latter are followed by the announcement "No entries this year"; this supplies confirmation that these headings have not been dropped from the index, and entries may reappear under them next year.

ELEMENTS, COMPOUNDS AND OTHER SUBSTANCES.

The names of elements, their compounds, a few compounds of special interest (e.g. "Water") and a few common materials (e.g. "Wood", "Paper") are included as headings. Under these, as well as under the appropriate "subject" headings, are listed any abstracts which contain significant physical information about the element, compound or substance named; except, however, that abstracts listed under the following headings are *not* also listed under the substance name:

Atoms
Molecules
Crystal structure, atomic
Spectra
Luminescence spectra
Raman spectra
All headings referring to nuclear properties; including Radioactivity

(The entries under these headings are themselves arranged in alphabetical order of substance or nuclide names, so that a given substance can be readily located).

Inorganic compounds of the elements are listed under the first element in the chemical formula, and all the compounds of a given element are grouped under a single heading (e.g. "Sodium compounds"). All alloys are grouped under the single heading "Alloys" in alphabetical order of the first constituent. All organic compounds are grouped under the single heading "Organic compounds", except polymers which are grouped under "Polymers", and those under special substance headings such as "Paper"; all the latter are listed in the collected list of headings at the end of the index.

LIST OF ERRATA.

An asterisk * following an Abstract Number indicates that a correction will be found in the list of Errata (see Contents List of volume).

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- Bitumen
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- Coal
- Concrete
- Clay
- Sand
- Soil

- Bone
- Blood
- Gelatin
- Leather
- Proteins
- Rubber
- Waxes
- Plastics
- Polymers

The chemical elements are listed by name, followed by their compounds. Organic compounds are grouped under the heading "Organic compounds". In addition, there are also the following special substance headings:

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- Alkali metal compounds
- Alkali earth metals
- Alkali earth compounds

- Alloys
- Rare earth metals
- Rare earth compounds
- Inert gases

See also the introduction at the beginning of the Subject Index.